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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/596,541

06/16/2006

Shinji Murakami

DK-US035133A

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EXAMINER

SINGH-PANDEY, ARTI R

ART UNIT

PAPER NUMBER

1794

MAIL DATE

DELIVERY MODE

08/19/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/596,541	<b>Applicant(s)</b> MURAKAMI ET AL.	
	<b>Examiner</b> Arti Singh-Pandey	<b>Art Unit</b> 1794	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 June 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☐ Claim(s) \_\_\_\_\_ is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>04/27/09, 08/13/08, 12/15/06</u> .                            | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Griffin (US 6,517,919) in view of Sahatjian et al. (US 4,943,473) or Effenberger et al. (US 5,357,726).

3. Griffin discloses a laminated product that includes a first layer of porous expanded polytetrafluoroethylene membrane and a second layer of woven fabric of polytetrafluoroethylene containing yarn (abstract). The yarn can also be an expanded PTFE yarn (col 4, ln 40-42). The first and second layer can be bonded by using an adhesive (col 2, ln 52-54) such as a fluorinated polymer adhesive (col 5, ln 3-6). The use of PTFE in the woven fabric provides good heat resistance and chemical resistance (col 5, ln 47-48). It should be noted that although Griffin fails to specifically disclose the interconnected passages and pathways claimed in the present invention, it is the Examiner's position that a laminate having the structure required by Griffin (i.e. porous and expanded film) would have various passages and pathways and therefore, the adhesive would be contained to a degree within those passages and pathways. Furthermore, because Griffin is using the same fibers, film and adhesive as required in the present invention, the laminated product of Griffin would inherently be waterproof.

Art Unit: 1794

With regard to claims 6, 15, and 21, it has been held that the recitation that an element is "adapted to" perform a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. In re Hutchison,<sup>69</sup> USPQ 138. Griffin fails to disclose a second composite attached to the second surface of the fabric, that the article is an vehicle fabric. Griffin also fails to teach that the article passes a Newark Flex test after 10,000 or 20,000 or 50,000 cycles, and that the article does not delaminate after 24 hours in a wet flex test.

Sahatjian et al. (US 4,943,473) disclose flexible laminated fluoropolymer containing composites that are fire and chemical resistant and contain textile substrates and fluoropolymer containing films. Adhesives may be used in making the composite (abstract). The material can be used in tents or other shelters (col 2, ln 30-32). The fluoropolymer used is polytetrafluoroethylene (col 2, ln 56-58) and the substrates include PTFE fibrous material (col 4, ln 59-68 to col 5, ln 1-7). The adhesive used can be a Viton adhesive (col 5, ln 26-29). It should be noted that Viton adhesive comprises vinylidene fluoride, hexafluoropropylene, and tetrafluoroethylene as required by the present invention (Johnson et al. US 5,525,887).

Effenberger et al. disclose composite materials for structural end uses such as for forming a dome or roof. This flexible reinforced textile composite material has a hydrophobic protective film element attached to the fabric (abstract). The textile material comprises PTFE fibers (col 3, ln 52- 66). The hydrophobic protective film comprises PTFE (col 3, ln 22-24). Additional film elements comprising the thermoplastic terpolymer of TFE, HFP, and VF2 (i.e. THV) may be employed (col 4, ln 24-27). It should be noted

Art Unit: 1794

that the Examiner is equating the additional film elements of the THV terpolymer in the PTFE film of Effenberger et al. to be the adhesive of the present invention. Furthermore, because Effenberger is using the same fibers, film, and adhesive, it is the Examiner's position that the composite material of Effenberger et al. is inherently waterproof and fire retardant. It would have been obvious to one having ordinary skill in the art to have used the THV adhesive of Effenberger et al. or Sahatjian et al. as the fluorinated polymer adhesive of Griffin, motivated by the desire to create a laminate with chemical and thermal resistance. It also would have been obvious to one having ordinary skill in the art to have placed a second composite on the second surface of the fabric of Griffin and Effenberger et al. or Sahatjian et al., since it has been held the mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8. In the present invention, one would have been placed a second composite on the second surface of the fabric motivated by the desire to create a laminate having increased durability and chemical and thermal resistance. It also would have been obvious to one having ordinary skill in the art to have used the laminated material of Griffin in an architectural fabric as disclosed by and Effenberger et al. or Sahatjian et al., motivated by the desire to create an architectural fabric that is durable and resistant to heat and chemicals. Although Griffin and Effenberger et al. or Sahatjian et al. do not explicitly teach the claimed Newark Flex test and wet flex test properties, it is reasonable to presume that these properties are inherent to the laminated article of Griffin and Effenberger et al. or Sahatjian et al. Support for said presumption is found in the use of like materials (i.e. PTFE fibers, porous PTFE film,

Art Unit: 1794

THV adhesive). The burden is upon Applicant to prove otherwise. In re Fitzgerald, 205 USPQ 594. In addition, the presently claimed property of the article passing a Newark Flex test after 10,000 or 20,000 or 50,000 cycles and that the article not delaminating after 24 hours in a wet flex test would obviously have been present once the Griffin and Effenberger et al. or Sahatjian et al. product is provided. Note In re Best, 195 USPQ at 433, footnote 4 (CCPA 1977).

### ***Conclusion***

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arti Singh-Pandey whose telephone number is 571-272-1483. The examiner can normally be reached on M-R 8-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald Tarazano can be reached on 571-272-1515. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/596,541  
Art Unit: 1794

Page 6

/Arti Singh-Pandey/  
Primary Examiner  
Art Unit 1794

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